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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Il-ju NA, et al.

Docket No: Q46562

Appln. No.: 08/939,442

Group Art Unit: 2615

Confirmation No.: 3896

Examiner: Christopher O. Onuaku

Filed: September 29, 1997

For: MULTIMEDIA SYSTEM FOR TRANSFERRING AND RECEIVING PROGRAM NUMBER AND METHODS THEREFOR

REQUEST FOR RECONSIDERATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action dated August 12, 2002, reconsideration and allowance of the subject application are requested. Upon entry of this Request, claims 1-68 are pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 1, 2, 22-24, 26-34, 58-60 and 62-68 are rejected under 35 U.S.C. § 102(e) as being anticipated by Saib (USP 6,097,878). Claims 3-8, 10-12, 17, 20, 21, 25, 35-41, 43-45, 48-50, 53, 56, 57 and 61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara et al. (USP 5,899,578; hereafter "Yanagihara") in view of Saib. Claims 9 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara in view of Saib and Couts et al. (USP 5,742,730; hereafter "Couts"). Claims 18, 19, 54 and 55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagihara in view of Saib and Fujii et al. (USP

5,966,385; hereafter "Fujii"). Claims 13-16, 46, 47, 51 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

In the Request for Reconsideration filed May 28, 2002, Applicant argued that the present invention as recited in the independent claims is not anticipated by or rendered obvious in view of Yanagihara and Haroun because the applied references do not teach or suggest generating a control command for transferring the program information, wherein the control command is not included in the PSI of the transport stream, as recited in the independent claims. In response, the Examiner now cites Saib and asserts that Saib discloses all of the features of independent claims 1, 22, 26, 30, 31, 34, 58, 62 and 67, and the combination of Yanagihara and Saib discloses all of the features of independent claims 3, 35 and 48.

Applicant respectfully submits that the claimed invention would not have been anticipated or rendered obvious in view of the Saib and Yanigahara, alone or in combination. In particular, similar to Applicant's position in the Request for Reconsideration filed May 28, Applicant submits that it is quite clear that the applied references, alone or combined, do not teach or suggest generating a control command for transferring the program information, wherein the control command is not included in the PSI of the transport stream.

Saib is directed to a system and method for automatically loading programming data of a show to be recorded by a home entertainment system. Upon receipt of a first command, the home entertainment system produces an electronic guide screen for displaying (i) a first plurality of shows currently being broadcast, and (ii) a second plurality of shows to be broadcast at a future time. Thereafter, upon receipt of a second command when one of the second plurality of

shows has been selected, a screen menu is generated. If an option grid of the screen menu is selected to record a future-broadcast show, programming data associated with that show is automatically loaded into a memory configured to contain shows scheduled to be recorded.

As shown in Figure 3, a home entertainment system 300 includes an antenna 305, an integrated receiver decoder (IRD) 310, and at least one analog-input peripheral device such as a display monitor or television receiver 320 and/or an analog recording device 330 such as a video cassette recorder. The antenna 305 receives a digital bit stream from an orbiting satellite, wherein the bit stream includes sensory data (e.g., video and/or audio, or communication data), and control information including programming data (e.g., show title, date of broadcast, broadcast channel number, show start-time, show end-time, etc.). The bit stream is provided to the IRD 310 which decodes the bit stream and processes the decoded bit stream to produce one or more output signals having appropriate formats. An output signal is placed in an analog video format and sent via communication line 325 to TV 320 for viewing, and/or via communication line 335 to analog recording device 330 for recording. Additionally, IRD 310 is responsible for responding to a plurality of commands from a remote control 315. A first command which causes the IRD to produce an output signal displaying at least an electronic guide screen on TV 320. A second command causes (a) the IRD to tune to the broadcast channel of that show if a cursor is positioned over the grid of a current-broadcast show, or (b) a screen menu to be displayed in combination with the electronic guide screen if the cursor is positioned over the grid of a future-broadcast show. Upon scrolling the cursor to be position above a selected option and

initiating a third command from the remote control 315, programming data associated with the show is automatically loaded for timed recording.

As shown in Figure 4, IRD 310 may be connected to other peripheral devices though an interface (IF) 415 which includes a link layer integrated circuit (IC) and a physical layer IC (not shown) and complies with the IEEE standards document 1394 (hereinafter referred to as "IEEE 1394"). This enables IRD 310 to connect digital-input peripheral devices such as digital VCRs, digital video disk players, digital laser disk players and the like. These digital-input peripheral devices supply control signals (e.g., IEEE 1394 commands) to a central processing unit (CPU) within main logic block 410 (see FIG. 5) through IF 415 and extension bus 420. Audio and video data is transferred from these digital-input peripheral devices to main logic block 410 through an IEEE 1394 serial bus 425. From the CPU, all IEEE 1394 commands are transferred to IF 415 via extension bus 420.

The Examiner appears to be asserting that Saib teach or suggest that the IRD 310 generates and transfers a control command based on program information of intended programs, wherein the control command is not included in the PSI of the transport stream, as claimed. However, the IRD 310 simply generates an electronic guide screen which is converted to a video signal and transmitted to the television for display. The front-end unit 400 of the IRD 310 then tunes to a particular show selected from the electronic guide screen via the remote control 315. The Examiner states since Saib teaches that "the IRD 310 is enabled to connect digital input peripheral devices such as digital VCRs ..., the digital VCR [is] enabled to connect to IEEE 1394 digital interface inherently includes a decoder to decode the received control command,

which includes program information." Although the serial bus 425 complies with the IEEE 1394 standard, it is quite clear that the IRD 310 does not generate a control command which includes program information.

As discussed in the "Background of the Invention" section of the present application, according to the IEEE 1394 serial bus standard, audio/video data is transferred in real time using the isochronous transfer mode while transactions required for communication and control commands such as the audio/video control command and transaction set (AV/C CTS) are transferred using the asynchronous transfer mode. For example, as shown in Figure 1 and discussed on page 3, commands from a remote controller 11 for the ATV 10, such as fast-forward and rewind, can be transferred to the HD-VCR 20 via the IEEE 1394 serial bus. However, control commands of the AV/C CTS transmitted to the to the HD-VCR 20 do not include commands for transferring information related to the MPEG2 system layer such a program number information.

Similarly, as the Examiner admits, Yanagihara does not disclose generating and transferring a control command based on program information of intended programs, wherein the control command is not included in the PSI of the transport stream, as claimed. Rather, as discussed in the previous Amendments, Yanagihara discloses modifying the PSI of the transport stream, rather than generating a new control command. That is, Yanagihara teaches that the PSI is modified by altering the PAT to include only the PID specified by the PMT having a selected program number. The audio data, video data and PSI are inserted into *isochronous* packets according to the IEEE-1394 standard and transmitted to the DVCR where the audio data, video

data and PSI are all recorded (see column 6, line 45 - column 7, line 4). On the other hand, the present invention is directed to adding a new command to the AV/C CTS for transferring a program number to recording/reproducing using the asynchronous transfer mode of the IEEE-1394 standard, wherein the control command is not included in the PSI of the transport stream.

Further, Applicant submits that that one of ordinary skill in the art would not have been motivated to modify the Yanagihara device based on the teachings Saib to produce the claimed invention since Yanagihara is directed to transferring selected program information modifying the PSI by altering the PAT to include only the PID specified by the PMT having a selected program number. Thus, modifying the Yanagihara device to generate and transfer a control command based on the program number information would eliminate the fundamental operational principles of the Yanagihara device. As set forth in MPEP 2143.01, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Further, the Examiner has failed to provide any objective and convincing reasoning why one of ordinary skill in the art would have been motivated to modify Yanagihara other than simply stating that "[p]roviding a control command which is not included in the PSI of a transport stream provides the desirable advantage of directly controlling the electronic device which simplifies the control process". However, providing a control command which is included in the PSI allows for the direct control of the electronic. Nor does the Examiner point out any portion of Yanagihara which suggests the desirability of modifying the reference's teachings.

Similarly, Applicant submits it is quite clear that Couts and Fujii, alone or in combination with Yanagihara and/or Saib, do not teach or suggest this feature of the present invention. In particular, none of the reference disclose a system which allows a user to input a program number of an intended program which is transferred from a receiver to a recording/reproducing device via a control command.

Accordingly, Applicant respectfully submits that independent claims 1, 3, 22, 26, 30, 31, 34, 35, 48, 58, 62, 67 and 68, as well as the dependent claims, should be allowable because applied references, alone or combined, do not teach or suggest all of the features of the claims.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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